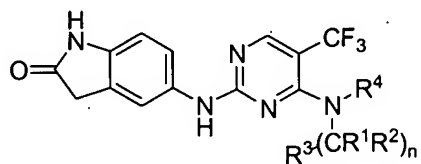


**IN THE CLAIMS:**

Please cancel claims 40-46, without prejudice. Applicants reserve the right to file one or more divisional applications directed to the subject matter of the deleted claims.

Please amend claims 1 and 2 in accordance with 37 C.F.R. § 1.121, as follows:

1. (Amended) A compound of the formula 1



1

or a pharmaceutically acceptable salt[, solvate, hydrate, or prodrug] thereof,

wherein n is an integer from 1 to 3;

each R<sup>1</sup> is a substituent independently selected from the group consisting of hydrogen, hydroxy, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -O(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -NR<sup>5</sup>R<sup>6</sup>, -SR<sup>7</sup>, -SOR<sup>7</sup>, -SO<sub>2</sub>R<sup>7</sup>, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NHCOR<sup>5</sup>, -NR<sup>5</sup>CONR<sup>5</sup>R<sup>6</sup>, and -NR<sup>5</sup>SO<sub>2</sub>R<sup>7</sup>; with the proviso that a heteroatom of the foregoing R<sup>1</sup> substituents may not be bound to an sp<sup>3</sup> carbon atom bound to another heteroatom; and said R<sup>1</sup> substituents, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -O(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -NR<sup>5</sup>R<sup>6</sup>, -SR<sup>7</sup>, -SOR<sup>7</sup>, -SO<sub>2</sub>R<sup>7</sup>, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NHCOR<sup>5</sup>, -NR<sup>5</sup>CONR<sup>5</sup>R<sup>6</sup>, and -NR<sup>5</sup>SO<sub>2</sub>R<sup>7</sup> groups are optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CF<sub>3</sub>, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup> and -CONR<sup>5</sup>R<sup>8</sup>; with the proviso that a heteroatom of the foregoing optional R<sup>1</sup> moieties may not be bound to an sp<sup>3</sup> carbon atom bound to another heteroatom;

each R<sup>2</sup> is a substituent independently selected from the group consisting of hydrogen, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, and -CONR<sup>5</sup>R<sup>6</sup>; with the proviso that a heteroatom of any of the foregoing R<sup>2</sup> substituents may not be bound to an sp<sup>3</sup> carbon atom that is bound to another heteroatom; and said R<sup>2</sup> substituents, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, and -CONR<sup>5</sup>R<sup>6</sup>, are optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CF<sub>3</sub>, -NO<sub>2</sub>, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -C=N-OH, -C=N-O((C<sub>1</sub>-C<sub>6</sub>)alkyl), -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>8</sup>, -SR<sup>7</sup>, -SOR<sup>7</sup>, -SO<sub>2</sub>R<sup>7</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NHCOR<sup>5</sup>, -NR<sup>5</sup>CONR<sup>5</sup>R<sup>6</sup>, and -NR<sup>5</sup>SO<sub>2</sub>R<sup>7</sup>, wherein said -(C<sub>2</sub>-C<sub>6</sub>)alkenyl and -(C<sub>2</sub>-C<sub>6</sub>)alkynyl R<sup>2</sup> moieties may be optionally substituted by one to three R<sup>5</sup> groups; and with the proviso that a heteroatom of the foregoing optional R<sup>2</sup> moieties may not be bound to an sp<sup>3</sup> carbon atom bound to another heteroatom;

R<sup>1</sup> and R<sup>2</sup> may be taken together with the atom(s) to which they are attached to form a cyclic group, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl or -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, wherein said cyclic group is optionally substituted by one to three moieties selected from the group consisting of hydrogen, halogen, hydroxy, -CF<sub>3</sub>, -NO<sub>2</sub>, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -C=N-OH, -C=N-O((C<sub>1</sub>-C<sub>6</sub>)alkyl), -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>8</sup>, -SR<sup>7</sup>, -SOR<sup>7</sup>, -SO<sub>2</sub>R<sup>7</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NHCOR<sup>5</sup>, -NR<sup>5</sup>CONR<sup>5</sup>R<sup>6</sup>, and -NR<sup>5</sup>SO<sub>2</sub>R<sup>7</sup>, wherein said -(C<sub>2</sub>-C<sub>6</sub>)alkenyl and -(C<sub>2</sub>-C<sub>6</sub>)alkynyl moieties of said cyclic group may be optionally substituted by one to three R<sup>5</sup> groups, and said cyclic group is optionally interrupted by one to three elements selected from the group consisting of -(C=O), -SO<sub>2</sub>, -S-, -O-, -N-, -NH- and -NR<sup>5</sup>, with the proviso that any of the foregoing cyclic group moieties or elements may not be bound to an sp<sup>3</sup> carbon atom that is bound to another heteroatom;

R<sup>3</sup> is a suitable substituent, including, but not limited to a substituent selected from the group consisting of:

(a) hydrogen;

(b) -(C<sub>6</sub>-C<sub>10</sub>)aryl or -(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, optionally substituted by one to three moieties independently selected from the group consisting of halogen, hydroxy, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>1</sub>-C<sub>6</sub>)alkyl-P(O)(O(C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, (C<sub>6</sub>-C<sub>10</sub>)aryl, (C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -NR<sup>5</sup>R<sup>6</sup>, -NHSO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NHSO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>-C<sub>1</sub>-C<sub>6</sub>)alkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl), -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O-SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(CO)(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(CO)CF<sub>3</sub>, -(CO)(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(CO)(C<sub>6</sub>-C<sub>10</sub>)aryl, -(CO)(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(CO)(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -(CO)O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(CO)O(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(CO)O(C<sub>6</sub>-C<sub>10</sub>)aryl, -(CO)O(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(CO)O(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -(CO)(C<sub>1</sub>-C<sub>6</sub>)alkyl-O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, SO<sub>2</sub>CF<sub>3</sub>, SO<sub>2</sub>NH<sub>2</sub>, SO<sub>2</sub>NH(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>NH(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -SO<sub>2</sub>N((C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -SO<sub>2</sub>N((C<sub>3</sub>-C<sub>6</sub>)cycloalkyl)<sub>2</sub>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, and -SO<sub>2</sub>N(C<sub>1</sub>-C<sub>6</sub>)alkyl-(C<sub>6</sub>-C<sub>10</sub>)aryl; wherein said -(C<sub>6</sub>-C<sub>10</sub>)aryl or -(C<sub>1</sub>-C<sub>9</sub>)heteroaryl are optionally interrupted by one to three elements selected from the group consisting of -(C=O), -SO<sub>2</sub>, -S-, -O-, -N-, -NH- and -NR<sup>5</sup>; and R<sup>5</sup> and R<sup>6</sup> of said NR<sup>5</sup>R<sup>6</sup> R<sup>3</sup>(b) group may be taken together with the atoms to which they are attached to form a -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl;

(c) -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, and -(C<sub>1</sub>-C<sub>6</sub>)alkyl-(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, optionally substituted by one to three moieties independently selected from the group consisting of halogen, hydroxy, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>1</sub>-C<sub>6</sub>)alkyl-P(O)(O(C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, (C<sub>6</sub>-C<sub>10</sub>)aryl, (C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -NR<sup>5</sup>R<sup>6</sup>, -NSO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NHSO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>-C<sub>1</sub>-C<sub>6</sub>)alkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl), -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O-SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O-SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -(CO)(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(CO)CF<sub>3</sub>, -(CO)(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(CO)(C<sub>6</sub>-C<sub>10</sub>)aryl, -(CO)(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(CO)(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -(CO)O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(CO)O(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(CO)O(C<sub>6</sub>-C<sub>10</sub>)aryl, -(CO)O(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(CO)O(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -(CO)(C<sub>1</sub>-C<sub>6</sub>)alkyl-O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, SO<sub>2</sub>CF<sub>3</sub>, SO<sub>2</sub>NH<sub>2</sub>, SO<sub>2</sub>NH(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>NH(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -SO<sub>2</sub>N((C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -SO<sub>2</sub>N((C<sub>3</sub>-C<sub>6</sub>)cycloalkyl)<sub>2</sub>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, and -SO<sub>2</sub>N(C<sub>1</sub>-C<sub>6</sub>)alkyl-(C<sub>6</sub>-C<sub>10</sub>)aryl; wherein said -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(C<sub>2</sub>-

C<sub>9</sub>)heterocyclyl, and -(C<sub>1</sub>-C<sub>6</sub>)alkyl-(C<sub>2</sub>-C<sub>9</sub>) heterocyclyl are optionally interrupted by one to three elements selected from the group consisting of -(C=O), -SO<sub>2</sub>, -S-, -O-, -N-, -NH- and -NR<sup>5</sup>; and R<sup>5</sup> and R<sup>6</sup> of said NR<sup>5</sup>R<sup>6</sup> R<sup>3</sup>(b) group may be taken together with the atoms to which they are attached to form a -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl;

(d) -(C<sub>1</sub>-C<sub>6</sub>)alkyl optionally substituted by one to three moieties selected from the group consisting of halogen, hydroxy, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>1</sub>-C<sub>6</sub>)alkyl-P(O)(O(C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, (C<sub>6</sub>-C<sub>10</sub>)aryl, (C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -NR<sup>5</sup>R<sup>6</sup>, -NSO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NHSO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>-C<sub>1</sub>-C<sub>6</sub>)alkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl), -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O-SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(CO)(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(CO)CF<sub>3</sub>, -(CO)(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(CO)(C<sub>6</sub>-C<sub>10</sub>)aryl, -(CO)(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(CO)(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -(CO)O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(CO)O(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(CO)O(C<sub>6</sub>-C<sub>10</sub>)aryl, -(CO)O(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(CO)O(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -(CO)(C<sub>1</sub>-C<sub>6</sub>)alkyl-O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, SO<sub>2</sub>CF<sub>3</sub>, SO<sub>2</sub>NH<sub>2</sub>, SO<sub>2</sub>NH(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>NH(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -SO<sub>2</sub>N((C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -SO<sub>2</sub>N((C<sub>3</sub>-C<sub>6</sub>)cycloalkyl)<sub>2</sub>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, and -SO<sub>2</sub>N(C<sub>1</sub>-C<sub>6</sub>)alkyl-(C<sub>6</sub>-C<sub>10</sub>)aryl; wherein said -(C<sub>1</sub>-C<sub>6</sub>)alkyl is optionally interrupted by one to three elements selected from the group consisting of -(C=O), -SO<sub>2</sub>, -S-, -O-, -N-, -NH- and -NR<sup>5</sup>; and R<sup>5</sup> and R<sup>6</sup> of said NR<sup>5</sup>R<sup>6</sup> R<sup>3</sup>(b) group may be taken together with the atoms to which they are attached to form a -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl;

and wherein each R<sup>3</sup> (b)-(d) substituent, moiety, or element is optionally substituted by one to three radicals independently selected from the group consisting of hydrogen, halogen, hydroxy, -CF<sub>3</sub>, -NO<sub>2</sub>, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>6</sub>-C<sub>10</sub>)aryl, -(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -O(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -C=N-OH, -C=N-O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup>R<sup>6</sup>, -SR<sup>7</sup>, -SOR<sup>7</sup>, -SO<sub>2</sub>R<sup>7</sup>, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NHCOR<sup>5</sup>, -NR<sup>5</sup>CONR<sup>5</sup>R<sup>6</sup>, and -NR<sup>5</sup>SO<sub>2</sub>R<sup>7</sup>; with the proviso that a heteroatom of the foregoing R<sup>3</sup> (b)-(d) substituents, moieties, elements or radicals may not be bound to an sp<sup>3</sup> carbon atom bound to another heteroatom; and wherein R<sup>5</sup> and R<sup>6</sup> of said -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, and -NR<sup>5</sup>CONR<sup>5</sup>R<sup>6</sup> groups may be taken together with the atoms to which they are attached to form a -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl;

R<sup>4</sup> is a substituent selected from the group consisting of hydrogen, (C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, and -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl; wherein said (C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, and -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl R<sup>4</sup> substituents are optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -CN, -NR<sup>5</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, and -CONR<sup>5</sup>R<sup>8</sup>; with the proviso that a heteroatom of the foregoing R<sup>4</sup> substituents may not be bound to an sp<sup>3</sup> carbon atom bound to another heteroatom; and wherein R<sup>5</sup> and R<sup>8</sup> of said -CONR<sup>5</sup>R<sup>8</sup> group may be taken together with the atoms to which they are attached to form a -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl or -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl;

R<sup>5</sup> and R<sup>6</sup> are each substituents independently selected from the group consisting of hydrogen, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>6</sub>-C<sub>10</sub>)aryl, and -(C<sub>1</sub>-C<sub>9</sub>)heteroaryl; wherein said -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>6</sub>-C<sub>10</sub>)aryl, and -(C<sub>1</sub>-C<sub>9</sub>)heteroaryl R<sup>5</sup>

or R<sup>6</sup> substituents are optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, -CF<sub>3</sub>, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NH(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NH(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -NH(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -NH(C<sub>6</sub>-C<sub>10</sub>)aryl, -NH(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -N((C<sub>3</sub>-C<sub>7</sub>)cycloalkyl)<sub>2</sub>, -N((C<sub>2</sub>-C<sub>9</sub>)heterocyclyl)<sub>2</sub>, -N((C<sub>6</sub>-C<sub>10</sub>)aryl)<sub>2</sub>, -N((C<sub>1</sub>-C<sub>9</sub>)heteroaryl)<sub>2</sub>, -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -O(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -O(C<sub>6</sub>-C<sub>10</sub>)aryl, -O(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>7</sup>, -CONH<sub>2</sub>, -CONHR<sup>7</sup>, and -CONR<sup>7</sup>R<sup>8</sup>; with the proviso that a heteroatom of the foregoing R<sup>5</sup> or R<sup>6</sup> substituents or moieties may not be bound to an sp<sup>3</sup> carbon atom bound to another heteroatoms; and wherein R<sup>7</sup> and R<sup>8</sup> of said -CONR<sup>7</sup>R<sup>8</sup> group may be taken together with the atoms to which they are attached to form a -(C<sub>1</sub>-C<sub>9</sub>) heteroaryl;

R<sup>5</sup> and R<sup>6</sup> may be taken together with the atom(s) to which they are attached to form a cyclic group, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl or -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, wherein said cyclic group is optionally substituted by one to three moieties selected from the group consisting of hydrogen, halogen, hydroxy, -CF<sub>3</sub>, -NO<sub>2</sub>, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -C=N-OH, -C=N-O((C<sub>1</sub>-C<sub>6</sub>)alkyl), -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>8</sup>, -SR<sup>7</sup>, -SOR<sup>7</sup>, -SO<sub>2</sub>R<sup>7</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NHCOR<sup>5</sup>, -NR<sup>5</sup>CONR<sup>5</sup>R<sup>6</sup>, and -NR<sup>5</sup>SO<sub>2</sub>R<sup>7</sup>, wherein said -(C<sub>2</sub>-C<sub>6</sub>)alkenyl and -(C<sub>2</sub>-C<sub>6</sub>)alkynyl moieties of said cyclic group may be optionally substituted by one to three R<sup>7</sup> groups, and said cyclic group is optionally interrupted by one to three elements selected from the group consisting of -(C=O), -SO<sub>2</sub>, -S-, -O-, -N-, -NH- and -NR<sup>5</sup>, with the proviso that any of the foregoing cyclic group moieties or elements may not be bound to an sp<sup>3</sup> carbon atom that is bound to another heteroatom;

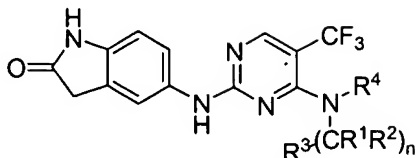
R<sup>7</sup> is a substituent selected from the group consisting of -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>6</sub>-C<sub>10</sub>)aryl, and -(C<sub>1</sub>-C<sub>9</sub>) heteroaryl; wherein said -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>6</sub>-C<sub>10</sub>)aryl, and -(C<sub>1</sub>-C<sub>9</sub>) heteroaryl R<sup>7</sup> substituents are optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup>, and -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, with the proviso that a heteroatom of the foregoing R<sup>7</sup> substituents or moieties may not be bound to an sp<sup>3</sup> carbon atom bound to another heteroatom;

R<sup>8</sup> is a substituent selected from the group consisting of hydrogen, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>6</sub>-C<sub>10</sub>)aryl, and -(C<sub>1</sub>-C<sub>9</sub>) heteroaryl; wherein said -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>6</sub>-C<sub>10</sub>)aryl, and -(C<sub>1</sub>-C<sub>9</sub>) heteroaryl R<sup>8</sup> radicals are optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NH<sub>2</sub>, -NHR<sup>9</sup>, -NR<sup>9</sup>, OR<sup>9</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>10</sup>, -CONH<sub>2</sub>, -CONHR<sup>10</sup>, and -CONR<sup>10</sup>R<sup>11</sup>; with the proviso that a heteroatom of the foregoing R<sup>8</sup> substituents or moieties may not be bound to an sp<sup>3</sup> carbon atom bound to another heteroatom; and wherein R<sup>10</sup> and R<sup>11</sup> of -CONR<sup>10</sup>R<sup>11</sup> may be taken together with the atoms to which they are attached to form a -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl;

R<sup>9</sup> and R<sup>10</sup> are each -(C<sub>1</sub>-C<sub>6</sub>)alkyl and may be taken together with the atoms to which they are attached to form a -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl; and

$R^{11}$  is hydrogen or  $-(C_1-C_6)$ alkyl.

2. (Amended) A compound of the formula 1



or a pharmaceutically acceptable salt[, solvate, hydrate, or prodrug] thereof,

wherein n is an integer from 1 to 3;

each  $R^1$  is a substituent independently selected from the group consisting of hydrogen, hydroxy,  $-(C_1-C_6)$ alkyl,  $-(C_3-C_7)$ cycloalkyl,  $-(C_2-C_9)$ heterocyclyl,  $-O(C_1-C_6)$ alkyl,  $-O(C_3-C_7)$ cycloalkyl,  $-O(C_2-C_9)$ heterocyclyl,  $-NR^5R^6$ ,  $-SR^7$ ,  $-SOR^7$ ,  $-SO_2R^7$ ,  $-CO_2R^5$ ,  $-CONR^5R^6$ ,  $-SO_2NR^5R^6$ ,  $-NHCOR^5$ ,  $-NR^5CONR^5R^6$ , and  $-NR^5SO_2R^7$ ; with the proviso that a heteroatom of the foregoing  $R^1$  substituents may not be bound to an  $sp^3$  carbon atom bound to another heteroatom; and said  $R^1$  substituents,  $-(C_1-C_6)$ alkyl,  $-(C_3-C_7)$ cycloalkyl,  $-(C_2-C_9)$ heterocyclyl,  $-O(C_1-C_6)$ alkyl,  $-O(C_3-C_7)$ cycloalkyl,  $-O(C_2-C_9)$ heterocyclyl,  $-NR^5R^6$ ,  $-SR^7$ ,  $-SOR^7$ ,  $-SO_2R^7$ ,  $-CO_2R^5$ ,  $-CONR^5R^6$ ,  $-SO_2NR^5R^6$ ,  $-NHCOR^5$ ,  $-NR^5CONR^5R^6$ , and  $-NR^5SO_2R^7$  groups are optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy,  $-CF_3$ ,  $-CN$ ,  $-(C_1-C_6)$ alkyl,  $-NR^5R^6$ ,  $-OR^5$ ,  $-(C_3-C_7)$ cycloalkyl,  $-(C_2-C_9)$ heterocyclyl,  $-CO_2R^5$ ,  $-CONR^5R^6$  and  $-CONR^5R^8$ ; with the proviso that a heteroatom of the foregoing optional  $R^1$  moieties may not be bound to an  $sp^3$  carbon atom bound to another heteroatom;

each  $R^2$  is a substituent independently selected from the group consisting of hydrogen,  $-(C_1-C_6)$ alkyl,  $-(C_2-C_6)$ alkenyl,  $-(C_2-C_6)$ alkynyl,  $-(C_3-C_7)$ cycloalkyl,  $-(C_2-C_9)$ heterocyclyl,  $-CO_2R^5$ , and  $-CONR^5R^6$ ; with the proviso that a heteroatom of any of the foregoing  $R^2$  substituents may not be bound to an  $sp^3$  carbon atom that is bound to another heteroatom; and said  $R^2$  substituents,  $-(C_1-C_6)$ alkyl,  $-(C_2-C_6)$ alkenyl,  $-(C_2-C_6)$ alkynyl,  $-(C_3-C_7)$ cycloalkyl,  $-(C_2-C_9)$ heterocyclyl,  $-CO_2R^5$ , and  $-CONR^5R^6$ , are optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy,  $-CF_3$ ,  $-NO_2$ ,  $-CN$ ,  $-(C_1-C_6)$ alkyl,  $-(C_2-C_6)$ alkenyl,  $-(C_2-C_6)$ alkynyl,  $-C=N-OH$ ,  $-C=N-O((C_1-C_6)alkyl)$ ,  $-NR^5R^6$ ,  $-OR^5$ ,  $-(C_3-C_7)$ cycloalkyl,  $-(C_2-C_9)$ heterocyclyl,  $-CO_2R^5$ ,  $-CONR^5R^6$ ,  $-CONR^5R^8$ ,  $-SR^7$ ,  $-SOR^7$ ,  $-SO_2R^7$ ,  $-SO_2NR^5R^6$ ,  $-NHCOR^5$ ,  $-NR^5CONR^5R^6$ , and  $-NR^5SO_2R^7$ , wherein said  $-(C_2-C_6)$ alkenyl and  $-(C_2-C_6)$ alkynyl  $R^2$  moieties may be optionally substituted by one to three  $R^5$  groups; and with the proviso that a heteroatom of the foregoing optional  $R^2$  moieties may not be bound to an  $sp^3$  carbon atom bound to another heteroatom;

$R^1$  and  $R^2$  may be taken together with the atom(s) to which they are attached to form a cyclic group,  $-(C_3-C_{10})$ cycloalkyl or  $-(C_2-C_9)$ heterocyclyl, wherein said cyclic group is optionally substituted by one to three moieties selected from the group consisting of hydrogen, halogen,

hydroxy,  $-\text{CF}_3$ ,  $-\text{NO}_2$ ,  $-\text{CN}$ ,  $-(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-(\text{C}_2-\text{C}_6)\text{alkenyl}$ ,  $-(\text{C}_2-\text{C}_6)\text{alkynyl}$ ,  $-\text{C}=\text{N}-\text{OH}$ ,  $-\text{C}=\text{N}-\text{O}((\text{C}_1-\text{C}_6)\text{alkyl})$ ,  $-\text{NR}^5\text{R}^6$ ,  $-\text{OR}^5$ ,  $-(\text{C}_3-\text{C}_7)\text{cycloalkyl}$ ,  $-(\text{C}_2-\text{C}_9)\text{heterocyclyl}$ ,  $-\text{CO}_2\text{R}^5$ ,  $-\text{CONR}^5\text{R}^6$ ,  $-\text{CONR}^5\text{R}^8$ ,  $-\text{SR}^7$ ,  $-\text{SOR}^7$ ,  $-\text{SO}_2\text{R}^7$ ,  $-\text{SO}_2\text{NR}^5\text{R}^6$ ,  $-\text{NHCOR}^5$ ,  $-\text{NR}^5\text{CONR}^5\text{R}^6$ , and  $-\text{NR}^5\text{SO}_2\text{R}^7$ , wherein said  $-(\text{C}_2-\text{C}_6)\text{alkenyl}$  and  $-(\text{C}_2-\text{C}_6)\text{alkynyl}$  moieties of said cyclic group may be optionally substituted by one to three  $\text{R}^5$  groups, and said cyclic group is optionally interrupted by one to three elements selected from the group consisting of  $-(\text{C}=\text{O})$ ,  $-\text{SO}_2$ ,  $-\text{S}-$ ,  $-\text{O}-$ ,  $-\text{N}-$ ,  $-\text{NH}-$  and  $-\text{NR}^5$ , with the proviso that any of the foregoing cyclic group moieties or elements may not be bound to an  $\text{sp}^3$  carbon atom that is bound to another heteroatom;

$\text{R}^3$  is a substituent selected from the group consisting of:

(a) hydrogen;

(b)  $-(\text{C}_6-\text{C}_{10})\text{aryl}$  or  $-(\text{C}_1-\text{C}_9)\text{heteroaryl}$ , optionally substituted by one to three moieties independently selected from the group consisting of halogen, hydroxy,  $-(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-(\text{C}_1-\text{C}_6)\text{alkyl}-\text{P}(\text{O})(\text{O}(\text{C}_1-\text{C}_6)\text{alkyl})_2$ ,  $-(\text{C}_3-\text{C}_{10})\text{cycloalkyl}$ ,  $(\text{C}_6-\text{C}_{10})\text{aryl}$ ,  $(\text{C}_2-\text{C}_9)\text{heterocyclyl}$ ,  $-(\text{C}_1-\text{C}_9)\text{heteroaryl}$ ,  $-\text{NR}^5\text{R}^6$ ,  $-\text{NHSO}_2(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-\text{NHSO}_2(\text{C}_3-\text{C}_6)\text{cycloalkyl}$ ,  $-\text{N}((\text{C}_1-\text{C}_6)\text{alkyl})(\text{SO}_2-\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-\text{N}((\text{C}_1-\text{C}_6)\text{alkyl})(\text{SO}_2(\text{C}_3-\text{C}_6)\text{cycloalkyl})$ ,  $-\text{O}(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-\text{O}^1\text{SO}_2(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-(\text{CO})(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-(\text{CO})\text{CF}_3$ ,  $-(\text{CO})(\text{C}_3-\text{C}_{10})\text{cycloalkyl}$ ,  $-(\text{CO})(\text{C}_6-\text{C}_{10})\text{aryl}$ ,  $-(\text{CO})(\text{C}_2-\text{C}_9)\text{heterocyclyl}$ ,  $-(\text{CO})(\text{C}_1-\text{C}_9)\text{heteroaryl}$ ,  $-(\text{CO})\text{O}(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-(\text{CO})\text{O}(\text{C}_3-\text{C}_{10})\text{cycloalkyl}$ ,  $-(\text{CO})\text{O}(\text{C}_6-\text{C}_{10})\text{aryl}$ ,  $-(\text{CO})\text{O}(\text{C}_2-\text{C}_9)\text{heterocyclyl}$ ,  $-(\text{CO})\text{O}(\text{C}_1-\text{C}_9)\text{heteroaryl}$ ,  $-(\text{CO})(\text{C}_1-\text{C}_6)\text{alkyl}-\text{O}(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-\text{SO}_2(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-\text{SO}_2(\text{C}_3-\text{C}_6)\text{cycloalkyl}$ ,  $\text{SO}_2\text{CF}_3$ ,  $\text{SO}_2\text{NH}_2$ ,  $\text{SO}_2\text{NH}(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-\text{SO}_2\text{NH}(\text{C}_3-\text{C}_6)\text{cycloalkyl}$ ,  $-\text{SO}_2\text{N}((\text{C}_1-\text{C}_6)\text{alkyl})_2$ ,  $-\text{SO}_2\text{N}((\text{C}_3-\text{C}_6)\text{cycloalkyl})_2$ ,  $-\text{SO}_2\text{NR}^5\text{R}^6$ , and  $-\text{SO}_2\text{N}(\text{C}_1-\text{C}_6)\text{alkyl}-(\text{C}_6-\text{C}_{10})\text{aryl}$ ; wherein said  $-(\text{C}_6-\text{C}_{10})\text{aryl}$  or  $-(\text{C}_1-\text{C}_9)\text{heteroaryl}$  are optionally interrupted by one to three elements selected from the group consisting of  $-(\text{C}=\text{O})$ ,  $-\text{SO}_2$ ,  $-\text{S}-$ ,  $-\text{O}-$ ,  $-\text{N}-$ ,  $-\text{NH}-$  and  $-\text{NR}^5$ ; and  $\text{R}^5$  and  $\text{R}^6$  of said  $\text{NR}^5\text{R}^6$   $\text{R}^3$ (b) group may be taken together with the atoms to which they are attached to form a  $-(\text{C}_2-\text{C}_9)\text{heterocyclyl}$ ;

(c)  $-(\text{C}_3-\text{C}_{10})\text{cycloalkyl}$ ,  $-(\text{C}_2-\text{C}_9)\text{heterocyclyl}$ , and  $-(\text{C}_1-\text{C}_6)\text{alkyl}-(\text{C}_2-\text{C}_9)\text{heterocyclyl}$ , optionally substituted by one to three moieties independently selected from the group consisting of halogen, hydroxy,  $-(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-(\text{C}_1-\text{C}_6)\text{alkyl}-\text{P}(\text{O})(\text{O}(\text{C}_1-\text{C}_6)\text{alkyl})_2$ ,  $-(\text{C}_3-\text{C}_{10})\text{cycloalkyl}$ ,  $(\text{C}_6-\text{C}_{10})\text{aryl}$ ,  $(\text{C}_2-\text{C}_9)\text{heterocyclyl}$ ,  $-(\text{C}_1-\text{C}_9)\text{heteroaryl}$ ,  $-\text{NR}^5\text{R}^6$ ,  $-\text{NSO}_2(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-\text{NHSO}_2(\text{C}_3-\text{C}_6)\text{cycloalkyl}$ ,  $-\text{N}((\text{C}_1-\text{C}_6)\text{alkyl})(\text{SO}_2-\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-\text{N}((\text{C}_1-\text{C}_6)\text{alkyl})(\text{SO}_2(\text{C}_3-\text{C}_6)\text{cycloalkyl})$ ,  $-\text{O}(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-\text{O}-\text{SO}_2(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-\text{O}-\text{SO}_2(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-(\text{CO})(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-(\text{CO})\text{CF}_3$ ,  $-(\text{CO})(\text{C}_3-\text{C}_{10})\text{cycloalkyl}$ ,  $-(\text{CO})(\text{C}_6-\text{C}_{10})\text{aryl}$ ,  $-(\text{CO})(\text{C}_2-\text{C}_9)\text{heterocyclyl}$ ,  $-(\text{CO})(\text{C}_1-\text{C}_9)\text{heteroaryl}$ ,  $-(\text{CO})\text{O}(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-(\text{CO})\text{O}(\text{C}_3-\text{C}_{10})\text{cycloalkyl}$ ,  $-(\text{CO})\text{O}(\text{C}_6-\text{C}_{10})\text{aryl}$ ,  $-(\text{CO})\text{O}(\text{C}_2-\text{C}_9)\text{heterocyclyl}$ ,  $-(\text{CO})\text{O}(\text{C}_1-\text{C}_9)\text{heteroaryl}$ ,  $-(\text{CO})(\text{C}_1-\text{C}_6)\text{alkyl}-\text{O}(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-\text{SO}_2(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-\text{SO}_2(\text{C}_3-\text{C}_6)\text{cycloalkyl}$ ,  $\text{SO}_2\text{CF}_3$ ,  $\text{SO}_2\text{NH}_2$ ,  $\text{SO}_2\text{NH}(\text{C}_1-\text{C}_6)\text{alkyl}$ ,  $-\text{SO}_2\text{NH}(\text{C}_3-\text{C}_6)\text{cycloalkyl}$ ,  $-\text{SO}_2\text{N}((\text{C}_1-\text{C}_6)\text{alkyl})_2$ ,  $-\text{SO}_2\text{N}((\text{C}_3-\text{C}_6)\text{cycloalkyl})_2$ ,  $-\text{SO}_2\text{NR}^5\text{R}^6$ , and  $-\text{SO}_2\text{N}(\text{C}_1-\text{C}_6)\text{alkyl}-(\text{C}_6-\text{C}_{10})\text{aryl}$ ; wherein said  $-(\text{C}_3-\text{C}_{10})\text{cycloalkyl}$ ,  $-(\text{C}_2-\text{C}_9)\text{heterocyclyl}$ , and  $-(\text{C}_1-\text{C}_6)\text{alkyl}-(\text{C}_2-\text{C}_9)\text{heterocyclyl}$  are optionally interrupted by one to three elements selected from the group consisting of  $-(\text{C}=\text{O})$ ,  $-\text{SO}_2$ ,  $-\text{S}-$ ,  $-\text{O}-$ ,  $-\text{N}-$ ,  $-\text{NH}-$  and  $-\text{NR}^5$ ; and  $\text{R}^5$  and  $\text{R}^6$  of said  $\text{NR}^5\text{R}^6$   $\text{R}^3$ (b) group may be taken together with the atoms to which they are attached to form a  $-(\text{C}_2-\text{C}_9)\text{heterocyclyl}$ ;

(d)  $-(C_1-C_6)alkyl$  optionally substituted by one to three moieties selected from the group consisting of halogen, hydroxy,  $-(C_1-C_6)alkyl$ ,  $-(C_1-C_6)alkyl-P(O)(O(C_1-C_6)alkyl)_2$ ,  $-(C_3-C_{10})cycloalkyl$ ,  $(C_6-C_{10})aryl$ ,  $(C_2-C_9)heterocyclyl$ ,  $-(C_1-C_9)heteroaryl$ ,  $-NR^5R^6$ ,  $-NSO_2(C_1-C_6)alkyl$ ,  $-NHSO_2(C_3-C_6)cycloalkyl$ ,  $-N((C_1-C_6)alkyl)(SO_2-C_1-C_6)alkyl$ ,  $-N((C_1-C_6)alkyl)(SO_2(C_3-C_6)cycloalkyl)$ ,  $-O(C_1-C_6)alkyl$ ,  $-O-SO_2(C_1-C_6)alkyl$ ,  $-(CO)(C_1-C_6)alkyl$ ,  $-(CO)CF_3$ ,  $-(CO)(C_3-C_{10})cycloalkyl$ ,  $-(CO)(C_6-C_{10})aryl$ ,  $-(CO)(C_2-C_9)heterocyclyl$ ,  $-(CO)(C_1-C_9)heteroaryl$ ,  $-(CO)O(C_1-C_6)alkyl$ ,  $-(CO)O(C_3-C_{10})cycloalkyl$ ,  $-(CO)O(C_6-C_{10})aryl$ ,  $-(CO)O(C_2-C_9)heterocyclyl$ ,  $-(CO)O(C_1-C_9)heteroaryl$ ,  $-(CO)(C_1-C_6)alkyl-O(C_1-C_6)alkyl$ ,  $-SO_2(C_1-C_6)alkyl$ ,  $-SO_2(C_3-C_6)cycloalkyl$ ,  $SO_2CF_3$ ,  $SO_2NH_2$ ,  $SO_2NH(C_1-C_6)alkyl$ ,  $-SO_2NH(C_3-C_6)cycloalkyl$ ,  $-SO_2N((C_1-C_6)alkyl)_2$ ,  $-SO_2N((C_3-C_6)cycloalkyl)_2$ ,  $-SO_2NR^5R^6$ , and  $-SO_2N(C_1-C_6)alkyl-(C_6-C_{10})aryl$ ; wherein said  $-(C_1-C_6)alkyl$  is optionally interrupted by one to three elements selected from the group consisting of  $-(C=O)$ ,  $-SO_2$ ,  $-S-$ ,  $-O-$ ,  $-N-$ ,  $-NH-$  and  $-NR^5$ ; and  $R^5$  and  $R^6$  of said  $NR^5R^6$   $R^3(b)$  group may be taken together with the atoms to which they are attached to form a  $-(C_2-C_9)heterocyclyl$ ; and wherein each  $R^3(b)-(d)$  substituent, moiety, or element is optionally substituted by one to three radicals independently selected from the group consisting of hydrogen, halogen, hydroxy,  $-CF_3$ ,  $-NO_2$ ,  $-CN$ ,  $-(C_1-C_6)alkyl$ ,  $-(C_2-C_6)alkenyl$ ,  $-(C_2-C_6)alkynyl$ ,  $-(C_3-C_7)cycloalkyl$ ,  $-(C_2-C_9)heterocyclyl$ ,  $-(C_6-C_{10})aryl$ ,  $-(C_1-C_9)heteroaryl$ ,  $-O(C_1-C_6)alkyl$ ,  $-O(C_3-C_7)cycloalkyl$ ,  $-O(C_2-C_9)heterocyclyl$ ,  $-C=N-OH$ ,  $-C=N-O(C_1-C_6)alkyl$ ,  $-NR^5R^6$ ,  $-SR^7$ ,  $-SOR^7$ ,  $-SO_2R^7$ ,  $-CO_2R^5$ ,  $-CONR^5R^6$ ,  $-SO_2NR^5R^6$ ,  $-NHCOR^5$ ,  $-NR^5CONR^5R^6$ , and  $-NR^5SO_2R^7$ ; with the proviso that a heteroatom of the foregoing  $R^3(b)-(d)$  substituents, moieties, elements or radicals may not be bound to an  $sp^3$  carbon atom bound to another heteroatom; and wherein  $R^5$  and  $R^6$  of said  $-NR^5R^6$ ,  $-CONR^5R^6$ ,  $-SO_2NR^5R^6$ , and  $-NR^5CONR^5R^6$  groups may be taken together with the atoms to which they are attached to form a  $-(C_2-C_9)heterocyclyl$ ;

$R^4$  is a substituent selected from the group consisting of hydrogen,  $(C_1-C_6)alkyl$ ,  $-(C_3-C_7)cycloalkyl$ , and  $-(C_2-C_9)heterocyclyl$ ; wherein said  $(C_1-C_6)alkyl$ ,  $-(C_3-C_7)cycloalkyl$ , and  $-(C_2-C_9)heterocyclyl$   $R^4$  substituents are optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen,  $-(C_1-C_6)alkyl$ ,  $-CN$ ,  $-NR^5$ ,  $-OR^5$ ,  $-(C_3-C_7)cycloalkyl$ ,  $-(C_2-C_9)heterocyclyl$ ,  $-CO_2R^5$ , and  $-CONR^5R^8$ ; with the proviso that a heteroatom of the foregoing  $R^4$  substituents may not be bound to an  $sp^3$  carbon atom bound to another heteroatom; and wherein  $R^5$  and  $R^8$  of said  $-CONR^5R^8$  group may be taken together with the atoms to which they are attached to form a  $-(C_3-C_{10})cycloalkyl$  or  $-(C_2-C_9)heterocyclyl$ ;

$R^5$  and  $R^6$  are each substituents independently selected from the group consisting of hydrogen,  $-(C_1-C_6)alkyl$ ,  $-(C_3-C_7)cycloalkyl$ ,  $-(C_2-C_9)heterocyclyl$ ,  $-(C_6-C_{10})aryl$ , and  $-(C_1-C_9)heteroaryl$ ; wherein said  $-(C_1-C_6)alkyl$ ,  $-(C_3-C_7)cycloalkyl$ ,  $-(C_2-C_9)heterocyclyl$ ,  $-(C_6-C_{10})aryl$ , and  $-(C_1-C_9)heteroaryl$   $R^5$  or  $R^6$  substituents are optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen,  $-CF_3$ ,  $-CN$ ,  $-(C_1-C_6)alkyl$ ,  $-NH(C_1-C_6)alkyl$ ,  $-NH(C_3-C_7)cycloalkyl$ ,  $-NH(C_2-C_9)heterocyclyl$ ,  $-NH(C_6-C_{10})aryl$ ,  $-NH(C_1-C_9)heteroaryl$ ,  $-N((C_1-C_6)alkyl)_2$ ,  $-N((C_3-C_7)cycloalkyl)_2$ ,  $-N((C_2-C_9)heterocyclyl)_2$ ,  $-N((C_6-C_{10})aryl)_2$ ,  $-N((C_1-C_9)heteroaryl)_2$ ,  $-O(C_1-C_6)alkyl$ ,  $-O(C_3-C_7)cycloalkyl$ ,  $-O(C_2-C_9)heterocyclyl$ ,  $-O(C_6-C_{10})aryl$ ,  $-$

O(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>7</sup>, -CONH<sub>2</sub>, -CONHR<sup>7</sup>, and -CONR<sup>7</sup>R<sup>8</sup>; with the proviso that a heteroatom of the foregoing R<sup>5</sup> or R<sup>6</sup> substituents or moieties may not be bound to an sp<sup>3</sup> carbon atom bound to another heteroatoms; and wherein R<sup>7</sup> and R<sup>8</sup> of said -CONR<sup>7</sup>R<sup>8</sup> group may be taken together with the atoms to which they are attached to form a -(C<sub>1</sub>-C<sub>9</sub>) heteroaryl;

R<sup>5</sup> and R<sup>6</sup> may be taken together with the atom(s) to which they are attached to form a cyclic group, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl or -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, wherein said cyclic group is optionally substituted by one to three moieties selected from the group consisting of hydrogen, halogen, hydroxy, -CF<sub>3</sub>, -NO<sub>2</sub>, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -C=N-OH, -C=N-O((C<sub>1</sub>-C<sub>6</sub>)alkyl), -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>8</sup>, -SR<sup>7</sup>, -SOR<sup>7</sup>, -SO<sub>2</sub>R<sup>7</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NHCOR<sup>5</sup>, -NR<sup>5</sup>CONR<sup>5</sup>R<sup>6</sup>, and -NR<sup>5</sup>SO<sub>2</sub>R<sup>7</sup>, wherein said -(C<sub>2</sub>-C<sub>6</sub>)alkenyl and -(C<sub>2</sub>-C<sub>6</sub>)alkynyl moieties of said cyclic group may be optionally substituted by one to three R<sup>7</sup> groups, and said cyclic group is optionally interrupted by one to three elements selected from the group consisting of -(C=O), -SO<sub>2</sub>, -S-, -O-, -N-, -NH- and -NR<sup>5</sup>, with the proviso that any of the foregoing cyclic group moieties or elements may not be bound to an sp<sup>3</sup> carbon atom that is bound to another heteroatom;

R<sup>7</sup> is a substituent selected from the group consisting of -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>6</sub>-C<sub>10</sub>)aryl, and -(C<sub>1</sub>-C<sub>9</sub>) heteroaryl; wherein said -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>6</sub>-C<sub>10</sub>)aryl, and -(C<sub>1</sub>-C<sub>9</sub>) heteroaryl R<sup>7</sup> substituents are optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup><sub>2</sub>, and -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, with the proviso that a heteroatom of the foregoing R<sup>7</sup> substituents or moieties may not be bound to an sp<sup>3</sup> carbon atom bound to another heteroatom;

R<sup>8</sup> is a substituent selected from the group consisting of hydrogen, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>6</sub>-C<sub>10</sub>)aryl, and -(C<sub>1</sub>-C<sub>9</sub>) heteroaryl; wherein said -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>6</sub>-C<sub>10</sub>)aryl, and -(C<sub>1</sub>-C<sub>9</sub>) heteroaryl R<sup>8</sup> radicals are optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NH<sub>2</sub>, -NHR<sup>9</sup>, -NR<sup>9</sup><sub>2</sub>, OR<sup>9</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>10</sup>, -CONH<sub>2</sub>, -CONHR<sup>10</sup>, and -CONR<sup>10</sup>R<sup>11</sup>; with the proviso that a heteroatom of the foregoing R<sup>8</sup> substituents or moieties may not be bound to an sp<sup>3</sup> carbon atom bound to another heteroatom; and wherein R<sup>10</sup> and R<sup>11</sup> of -CONR<sup>10</sup>R<sup>11</sup> may be taken together with the atoms to which they are attached to form a -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl;

R<sup>9</sup> and R<sup>10</sup> are each -(C<sub>1</sub>-C<sub>6</sub>)alkyl and may be taken together with the atoms to which they are attached to form a -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl; and

R<sup>11</sup> is hydrogen or -(C<sub>1</sub>-C<sub>6</sub>)alkyl.

3. (Original) A compound of claim 2 wherein R<sup>1</sup> is selected from hydrogen, hydroxy, and -(C<sub>1</sub>-C<sub>6</sub>)alkyl, optionally substituted by one to three moieties independently selected from the



group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup> and -CONR<sup>5</sup>R<sup>8</sup>.

4. (Original) A compound of claim 2 wherein R<sup>1</sup> is -(C<sub>1</sub>-C<sub>6</sub>)alkyl, optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup> and -CONR<sup>5</sup>R<sup>8</sup>.

5. (Original) A compound of claim 2 wherein R<sup>1</sup> is selected from the group consisting of -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl and -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup> and -CONR<sup>5</sup>R<sup>8</sup>.

6. (Original) A compound of claim 2 wherein R<sup>1</sup> is selected from -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, and -O(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup> and -CONR<sup>5</sup>R<sup>8</sup>.

7. (Original) A compound of claim 2 wherein R<sup>1</sup> is -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup> and -CONR<sup>5</sup>R<sup>8</sup>.

8. (Original) A compound of claim 2 wherein R<sup>1</sup> is -NR<sup>5</sup>R<sup>6</sup>, optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup> and -CONR<sup>5</sup>R<sup>8</sup>.

9. (Original) A compound of claim 2 wherein R<sup>1</sup> is selected from -SR<sup>7</sup>, -SOR<sup>7</sup>, -SO<sub>2</sub>R<sup>7</sup>, and -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup> and -CONR<sup>5</sup>R<sup>8</sup>.

10. (Original) A compound of claim 2 wherein R<sup>1</sup> is -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup> and -CONR<sup>5</sup>R<sup>8</sup>.

11. (Original) A compound of claim 2 wherein R<sup>1</sup> is -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -NHCOR<sup>5</sup>, -NR<sup>5</sup>CONR<sup>5</sup>R<sup>6</sup>, or -NR<sup>5</sup>SO<sub>2</sub>R<sup>7</sup>, optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup> and -CONR<sup>5</sup>R<sup>8</sup>.

12. (Original) A compound of claim 2 wherein R<sup>1</sup> is -NR<sup>5</sup>SO<sub>2</sub>R<sup>7</sup>, optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup> and -CONR<sup>5</sup>R<sup>8</sup>.

13. (Original) A compound of claim 2 wherein  $R^2$  is hydrogen or  $-(C_1-C_6)alkyl$ , optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy,  $-NO_2$ ,  $-CN$ ,  $-(C_1-C_6)alkyl$ ,  $-(C_2-C_6)alkenyl$ ,  $-(C_2-C_6)alkynyl$ ,  $-C=N-OH$ ,  $-C=N-O((C_1-C_6)alkyl)$ ,  $-NR^5R^6$ ,  $-OR^5$ ,  $-(C_3-C_7)cycloalkyl$ ,  $-(C_2-C_9)heterocyclyl$ ,  $-CO_2R^5$ ,  $-CONR^5R^6$ ,  $-CONR^5R^8$ ,  $-SR^7$ ,  $-SOR^7$ ,  $-SO_2R^7$ ,  $-SO_2NR^5R^6$ ,  $-NHCOR^5$ ,  $-NR^5CONR^5R^6$ , and  $-NR^5SO_2R^7$ , wherein said  $-(C_2-C_6)alkenyl$  and  $-(C_2-C_6)alkynyl$   $R^2$  moieties may be optionally substituted by one to three  $R^5$  groups.

14. (Original) A compound of claim 2 wherein  $R^2$  is  $-(C_3-C_7)cycloalkyl$ , or  $-(C_2-C_9)heterocyclyl$ , optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy,  $-NO_2$ ,  $-CN$ ,  $-(C_1-C_6)alkyl$ ,  $-(C_2-C_6)alkenyl$ ,  $-(C_2-C_6)alkynyl$ ,  $-C=N-OH$ ,  $-C=N-O((C_1-C_6)alkyl)$ ,  $-NR^5R^6$ ,  $-OR^5$ ,  $-(C_3-C_7)cycloalkyl$ ,  $-(C_2-C_9)heterocyclyl$ ,  $-CO_2R^5$ ,  $-CONR^5R^6$ ,  $-CONR^5R^8$ ,  $-SR^7$ ,  $-SOR^7$ ,  $-SO_2R^7$ ,  $-SO_2NR^5R^6$ ,  $-NHCOR^5$ ,  $-NR^5CONR^5R^6$ , and  $-NR^5SO_2R^7$ , wherein said  $-(C_2-C_6)alkenyl$  and  $-(C_2-C_6)alkynyl$   $R^2$  moieties may be optionally substituted by one to three  $R^5$  groups.

15. (Original) A compound of claim 2 wherein  $R^2$  is  $-CO_2R^5$  and  $-CONR^5R^6$  optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy,  $-NO_2$ ,  $-CN$ ,  $-(C_1-C_6)alkyl$ ,  $-(C_2-C_6)alkenyl$ ,  $-(C_2-C_6)alkynyl$ ,  $-C=N-OH$ ,  $-C=N-O((C_1-C_6)alkyl)$ ,  $-NR^5R^6$ ,  $-OR^5$ ,  $-(C_3-C_7)cycloalkyl$ ,  $-(C_2-C_9)heterocyclyl$ ,  $-CO_2R^5$ ,  $-CONR^5R^6$ ,  $-CONR^5R^8$ ,  $-SR^7$ ,  $-SOR^7$ ,  $-SO_2R^7$ ,  $-SO_2NR^5R^6$ ,  $-NHCOR^5$ ,  $-NR^5CONR^5R^6$ , and  $-NR^5SO_2R^7$ , wherein said  $-(C_2-C_6)alkenyl$  and  $-(C_2-C_6)alkynyl$   $R^2$  moieties may be optionally substituted by one to three  $R^5$  groups.

16. (Original) A compound of claim 2 wherein  $R^1$  and  $R^2$  are taken together with the atom(s) to which they are attached to form a  $-(C_3-C_{10})cycloalkyl$  optionally substituted by one to three moieties selected from the group consisting of a hydrogen, halogen, hydroxy,  $-NO_2$ ,  $-CN$ ,  $-(C_1-C_6)alkyl$ ,  $-(C_2-C_6)alkenyl$ ,  $-(C_2-C_6)alkynyl$ ,  $-C=N-OH$ ,  $-C=N-O((C_1-C_6)alkyl)$ ,  $-NR^5R^6$ ,  $-OR^5$ ,  $-(C_3-C_7)cycloalkyl$ ,  $-(C_2-C_9)heterocyclyl$ ,  $-CO_2R^5$ ,  $-CONR^5R^6$ ,  $-CONR^5R^8$ ,  $-SR^7$ ,  $-SOR^7$ ,  $-SO_2R^7$ ,  $-SO_2NR^5R^6$ ,  $-NHCOR^5$ ,  $-NR^5CONR^5R^6$ , and  $-NR^5SO_2R^7$ , wherein said  $-(C_2-C_6)alkenyl$  and  $-(C_2-C_6)alkynyl$  moieties of said cyclic group may be optionally substituted by one to three  $R^5$  groups.

17. (Original) A compound of claim 2 wherein  $R^1$  and  $R^2$  are taken together with the atom(s) to which they are attached to form a  $-(C_2-C_9)heterocyclyl$  optionally substituted by one to three moieties selected from the group consisting of a hydrogen, halogen, hydroxy,  $-NO_2$ ,  $-CN$ ,  $-(C_1-C_6)alkyl$ ,  $-(C_2-C_6)alkenyl$ ,  $-(C_2-C_6)alkynyl$ ,  $-C=N-OH$ ,  $-C=N-O((C_1-C_6)alkyl)$ ,  $-NR^5R^6$ ,  $-OR^5$ ,  $-(C_3-C_7)cycloalkyl$ ,  $-(C_2-C_9)heterocyclyl$ ,  $-CO_2R^5$ ,  $-CONR^5R^6$ ,  $-CONR^5R^8$ ,  $-SR^7$ ,  $-SOR^7$ ,  $-SO_2R^7$ ,  $-SO_2NR^5R^6$ ,  $-NHCOR^5$ ,  $-NR^5CONR^5R^6$ , and  $-NR^5SO_2R^7$ , wherein said  $-(C_2-C_6)alkenyl$  and  $-(C_2-C_6)alkynyl$  moieties of said cyclic group may be optionally substituted by one to three  $R^5$  groups.

18. (Original) A compound of claim 2 wherein  $R^1$  is selected from hydrogen, hydroxy, and  $-(C_1-C_6)alkyl$ , optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy,  $-CN$ ,  $-(C_1-C_6)alkyl$ ,  $-NR^5R^6$ ,  $-OR^5$ ,  $-(C_3-C_7)cycloalkyl$ ,  $-(C_2-C_9)heterocyclyl$ ,  $-CO_2R^5$ ,  $-CONR^5R^6$  and  $-CONR^5R^8$ ; and  $R^2$  is hydrogen or  $-(C_1-$

C<sub>6</sub>)alkyl, optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -NO<sub>2</sub>, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -C=N-OH, -C=N-O((C<sub>1</sub>-C<sub>6</sub>)alkyl), -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>8</sup>, -SR<sup>7</sup>, -SOR<sup>7</sup>, -SO<sub>2</sub>R<sup>7</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NHCOR<sup>5</sup>, -NR<sup>5</sup>CONR<sup>5</sup>R<sup>6</sup>, and -NR<sup>5</sup>SO<sub>2</sub>R<sup>7</sup>, wherein said -(C<sub>2</sub>-C<sub>6</sub>)alkenyl and -(C<sub>2</sub>-C<sub>6</sub>)alkynyl R<sup>2</sup> moieties may be optionally substituted by one to three R<sup>5</sup> groups.

19. (Original) A compound of claim 2 wherein n is an integer from 1-2.

20. (Original) A compound of claim 2 wherein n is 1.

21. (Original) A compound of claim 2 wherein n is 2.

22. (Original) A compound of claim 2 wherein R<sup>1</sup> is selected from hydrogen, hydroxy, and -(C<sub>1</sub>-C<sub>6</sub>)alkyl, optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup>, and -CONR<sup>5</sup>R<sup>8</sup>; R<sup>2</sup> is hydrogen or -(C<sub>1</sub>-C<sub>6</sub>)alkyl, optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen, hydroxy, -NO<sub>2</sub>, -CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>2</sub>-C<sub>6</sub>)alkynyl, -C=N-OH, -C=N-O((C<sub>1</sub>-C<sub>6</sub>)alkyl), -NR<sup>5</sup>R<sup>6</sup>, -OR<sup>5</sup>, -(C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>8</sup>, -SR<sup>7</sup>, -SOR<sup>7</sup>, -SO<sub>2</sub>R<sup>7</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NHCOR<sup>5</sup>, -NR<sup>5</sup>CONR<sup>5</sup>R<sup>6</sup>, and -NR<sup>5</sup>SO<sub>2</sub>R<sup>7</sup>, wherein said -(C<sub>2</sub>-C<sub>6</sub>)alkenyl and -(C<sub>2</sub>-C<sub>6</sub>)alkynyl R<sup>2</sup> moieties may be optionally substituted by one to three R<sup>5</sup> groups; and n is 1.

23. (Original) A compound of claim 2 wherein R<sup>3</sup> is hydrogen.

24. (Original) A compound of claim 2 wherein R<sup>3</sup> is -(C<sub>6</sub>-C<sub>10</sub>)aryl or -(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, optionally substituted by one to three moieties independently selected from the group consisting of halogen, hydroxy, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>1</sub>-C<sub>6</sub>)alkyl-P(O)(O(C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, (C<sub>6</sub>-C<sub>10</sub>)aryl, (C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -NR<sup>5</sup>R<sup>6</sup>, -NHSO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NHSO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>-C<sub>1</sub>-C<sub>6</sub>)alkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl), -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O-SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(CO)(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(CO)CF<sub>3</sub>, -(CO)(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(CO)(C<sub>6</sub>-C<sub>10</sub>)aryl, -(CO)(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(CO)(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -(CO)O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(CO)O(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(CO)O(C<sub>6</sub>-C<sub>10</sub>)aryl, -(CO)O(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(CO)O(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -(CO)(C<sub>1</sub>-C<sub>6</sub>)alkyl-O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, SO<sub>2</sub>CF<sub>3</sub>, SO<sub>2</sub>NH<sub>2</sub>, SO<sub>2</sub>NH(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>NH(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -SO<sub>2</sub>N((C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -SO<sub>2</sub>N((C<sub>3</sub>-C<sub>6</sub>)cycloalkyl)<sub>2</sub>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, and -SO<sub>2</sub>N(C<sub>1</sub>-C<sub>6</sub>)alkyl-(C<sub>6</sub>-C<sub>10</sub>)aryl; wherein said -(C<sub>6</sub>-C<sub>10</sub>)aryl or -(C<sub>1</sub>-C<sub>9</sub>)heteroaryl are optionally interrupted by one to three elements selected from the group consisting of -(C=O), -SO<sub>2</sub>, -S-, -O-, -N-, -NH- and -NR<sup>5</sup>; and R<sup>5</sup> and R<sup>6</sup> of said NR<sup>5</sup>R<sup>6</sup> R<sup>3</sup>(b) group may be taken together with the atoms to which they are attached to form a -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl.

25. (Original) A compound of claim 2 wherein R<sup>3</sup> is -(C<sub>6</sub>-C<sub>10</sub>)aryl, optionally substituted by one to three moieties independently selected from the group consisting of halogen, hydroxy, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -NHSO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NHSO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>-C<sub>1</sub>-C<sub>6</sub>)alkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl), -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O-SO<sub>2</sub>(C<sub>1</sub>-

C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NH(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>NH(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -SO<sub>2</sub>N((C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -SO<sub>2</sub>N((C<sub>3</sub>-C<sub>6</sub>)cycloalkyl)<sub>2</sub>, and -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>.

26. (Original) A compound of claim 2 wherein R<sup>3</sup> is -(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, optionally substituted by one to three moieties independently selected from the group consisting of halogen, hydroxy, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -NHSO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NHSO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>-C<sub>1</sub>-C<sub>6</sub>)alkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl), -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O-SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NH(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>NH(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -SO<sub>2</sub>N((C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -SO<sub>2</sub>N((C<sub>3</sub>-C<sub>6</sub>)cycloalkyl)<sub>2</sub>, and -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>.

27. (Original) A compound of claim 2 wherein R<sup>3</sup> is selected from -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, and -(C<sub>1</sub>-C<sub>6</sub>)alkyl-(C<sub>2</sub>-C<sub>9</sub>) heterocyclyl, optionally substituted by one to three moieties independently selected from the group consisting of halogen, hydroxy, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>1</sub>-C<sub>6</sub>)alkyl-P(O)(O(C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, (C<sub>6</sub>-C<sub>10</sub>)aryl, (C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -NR<sup>5</sup>R<sup>6</sup>, -NSO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NHSO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>-C<sub>1</sub>-C<sub>6</sub>)alkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl), -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O-SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O-SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)alkyl, -(CO)(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(CO)CF<sub>3</sub>, -(CO)(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(CO)(C<sub>6</sub>-C<sub>10</sub>)aryl, -(CO)(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(CO)(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -(CO)O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(CO)O(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(CO)O(C<sub>6</sub>-C<sub>10</sub>)aryl, -(CO)O(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, -(CO)O(C<sub>1</sub>-C<sub>9</sub>)heteroaryl, -(CO)(C<sub>1</sub>-C<sub>6</sub>)alkyl-O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, SO<sub>2</sub>CF<sub>3</sub>, SO<sub>2</sub>NH<sub>2</sub>, SO<sub>2</sub>NH(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>NH(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -SO<sub>2</sub>N((C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -SO<sub>2</sub>N((C<sub>3</sub>-C<sub>6</sub>)cycloalkyl)<sub>2</sub>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, and -SO<sub>2</sub>N(C<sub>1</sub>-C<sub>6</sub>)alkyl-(C<sub>6</sub>-C<sub>10</sub>)aryl; wherein said -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, and -(C<sub>1</sub>-C<sub>6</sub>)alkyl-(C<sub>2</sub>-C<sub>9</sub>) heterocyclyl are optionally interrupted by one to three elements selected from the group consisting of -(C=O), -SO<sub>2</sub>, -S-, -O-, -N-, -NH- and -NR<sup>5</sup>; and R<sup>5</sup> and R<sup>6</sup> of said NR<sup>5</sup>R<sup>6</sup> R<sup>3</sup>(b) group may be taken together with the atoms to which they are attached to form a -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl.

28. (Original) A compound of claim 2 wherein R<sup>3</sup> is -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, optionally substituted by one to three moieties independently selected from the group consisting of halogen, hydroxy, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -NSO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NHSO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>-C<sub>1</sub>-C<sub>6</sub>)alkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl), -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O-SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, SO<sub>2</sub>NH<sub>2</sub>, SO<sub>2</sub>NH(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>NH(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -SO<sub>2</sub>N((C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -SO<sub>2</sub>N((C<sub>3</sub>-C<sub>6</sub>)cycloalkyl)<sub>2</sub>, and -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>.

29. (Original) A compound of claim 2 wherein R<sup>3</sup> is -(C<sub>2</sub>-C<sub>9</sub>)heterocyclyl, optionally substituted by one to three moieties independently selected from the group consisting of halogen, hydroxy, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -NSO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NHSO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>-C<sub>1</sub>-C<sub>6</sub>)alkyl, -N((C<sub>1</sub>-C<sub>6</sub>)alkyl)(SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl), -O(C<sub>1</sub>-C<sub>6</sub>)alkyl, -O-SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, SO<sub>2</sub>NH<sub>2</sub>, SO<sub>2</sub>NH(C<sub>1</sub>-C<sub>6</sub>)alkyl, -SO<sub>2</sub>NH(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -SO<sub>2</sub>N((C<sub>1</sub>-C<sub>6</sub>)alkyl)<sub>2</sub>, -SO<sub>2</sub>N((C<sub>3</sub>-C<sub>6</sub>)cycloalkyl)<sub>2</sub>, and -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>.

30. (Original) A compound of claim 2 wherein R<sup>3</sup> is -(C<sub>1</sub>-C<sub>6</sub>)alkyl-(C<sub>2</sub>-C<sub>9</sub>) heterocyclyl, optionally substituted by one to three moieties independently selected from the group consisting of halogen, hydroxy, -(C<sub>1</sub>-C<sub>6</sub>)alkyl, -(C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, -NSO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub>)alkyl, -NHSO<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -

$N((C_1-C_6)alkyl)(SO_2-C_1-C_6)alkyl$ ,  $-N((C_1-C_6)alkyl)(SO_2(C_3-C_6)cycloalkyl)$ ,  $-O(C_1-C_6)alkyl$ ,  $-O-SO_2(C_1-C_6)alkyl$ ,  $-SO_2(C_1-C_6)alkyl$ ,  $-SO_2(C_3-C_6)cycloalkyl$ ,  $SO_2NH_2$ ,  $SO_2NH(C_1-C_6)alkyl$ ,  $-SO_2NH(C_3-C_6)cycloalkyl$ ,  $-SO_2N((C_1-C_6)alkyl)_2$ ,  $-SO_2N((C_3-C_6)cycloalkyl)_2$ , and  $-SO_2NR^5R^6$ .

31. (Original) A compound of claim 2 wherein  $R^3$  is  $-(C_1-C_6)alkyl$  optionally substituted by one to three moieties selected from the group consisting of halogen, hydroxy,  $-(C_1-C_6)alkyl$ ,  $-(C_1-C_6)alkyl-P(O)(O(C_1-C_6)alkyl)_2$ ,  $-(C_3-C_{10})cycloalkyl$ ,  $(C_6-C_{10})aryl$ ,  $(C_2-C_9)heterocyclyl$ ,  $-(C_1-C_9)heteroaryl$ ,  $-NR^5R^6$ ,  $-NSO_2(C_1-C_6)alkyl$ ,  $-NHOSO_2(C_3-C_6)cycloalkyl$ ,  $-N((C_1-C_6)alkyl)(SO_2-C_1-C_6)alkyl$ ,  $-N((C_1-C_6)alkyl)(SO_2(C_3-C_6)cycloalkyl)$ ,  $-O(C_1-C_6)alkyl$ ,  $-O-SO_2(C_1-C_6)alkyl$ ,  $-(CO)(C_1-C_6)alkyl$ ,  $-(CO)CF_3$ ,  $-(CO)(C_3-C_{10})cycloalkyl$ ,  $-(CO)(C_6-C_{10})aryl$ ,  $-(CO)(C_2-C_9)heterocyclyl$ ,  $-(CO)(C_1-C_9)heteroaryl$ ,  $-(CO)O(C_1-C_6)alkyl$ ,  $-(CO)O(C_3-C_{10})cycloalkyl$ ,  $-(CO)O(C_6-C_{10})aryl$ ,  $-(CO)O(C_2-C_9)heterocyclyl$ ,  $-(CO)O(C_1-C_9)heteroaryl$ ,  $-(CO)(C_1-C_6)alkyl-O(C_1-C_6)alkyl$ ,  $-SO_2(C_1-C_6)alkyl$ ,  $-SO_2(C_3-C_6)cycloalkyl$ ,  $SO_2CF_3$ ,  $SO_2NH_2$ ,  $SO_2NH(C_1-C_6)alkyl$ ,  $-SO_2NH(C_3-C_6)cycloalkyl$ ,  $-SO_2N((C_1-C_6)alkyl)_2$ ,  $-SO_2N((C_3-C_6)cycloalkyl)_2$ ,  $-SO_2NR^5R^6$ , and  $-SO_2N(C_1-C_6)alkyl-(C_6-C_{10})aryl$ ; wherein said  $-(C_1-C_6)alkyl$  is optionally interrupted by one to three elements selected from the group consisting of  $-(C=O)$ ,  $-SO_2$ ,  $-S-$ ,  $-O-$ ,  $-N-$ ,  $-NH-$  and  $-NR^5$ ; and  $R^5$  and  $R^6$  of said  $NR^5R^6$   $R^3(b)$  group may be taken together with the atoms to which they are attached to form a  $-(C_2-C_9)heterocyclyl$ .

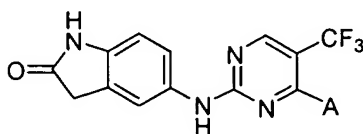
32. (Original) A compound of claim 2 wherein  $R^3$  is  $-(C_1-C_6)alkyl$  optionally substituted by one to three moieties selected from the group consisting of halogen, hydroxy,  $-(C_1-C_6)alkyl$ ,  $-(C_3-C_{10})cycloalkyl$ ,  $-NSO_2(C_1-C_6)alkyl$ ,  $-NHOSO_2(C_3-C_6)cycloalkyl$ ,  $-N((C_1-C_6)alkyl)(SO_2-C_1-C_6)alkyl$ ,  $-N((C_1-C_6)alkyl)(SO_2(C_3-C_6)cycloalkyl)$ ,  $-O(C_1-C_6)alkyl$ ,  $-O-SO_2(C_1-C_6)alkyl$ ,  $-SO_2(C_1-C_6)alkyl$ ,  $-SO_2(C_3-C_6)cycloalkyl$ ,  $-SO_2NH_2$ ,  $SO_2NH(C_1-C_6)alkyl$ ,  $-SO_2NH(C_3-C_6)cycloalkyl$ ,  $-SO_2N((C_1-C_6)alkyl)_2$ ,  $-SO_2N((C_3-C_6)cycloalkyl)_2$ , and  $-SO_2NR^5R^6$ .

33. (Original) A compound of claim 2 wherein  $R^4$  is a substituent selected from the group consisting of hydrogen,  $(C_1-C_6)alkyl$ , and  $-(C_3-C_7)cycloalkyl$ ; wherein said  $-(C_1-C_6)alkyl$  and  $-(C_3-C_7)cycloalkyl$  is optionally substituted by one to three moieties independently selected from the group consisting of hydrogen, halogen,  $-(C_1-C_6)alkyl$ ,  $-CN$ ,  $-NR^5$ ,  $-OR^5$ ,  $-(C_3-C_7)cycloalkyl$ ,  $-(C_2-C_9)heterocyclyl$ ,  $-CO_2R^5$ , and  $-CONR^5R^8$ ; with the proviso that a heteroatom of the foregoing  $R^4$  substituents may not be bound to an  $sp^3$  carbon atom bound to another heteroatom; and wherein  $R^5$  and  $R^8$  of said  $-CONR^5R^8$  group may be taken together with the atoms to which they are attached to form a  $-(C_2-C_9)heterocyclyl$ .

34. (Original) A compound of claim 2 wherein  $R^4$  is hydrogen.

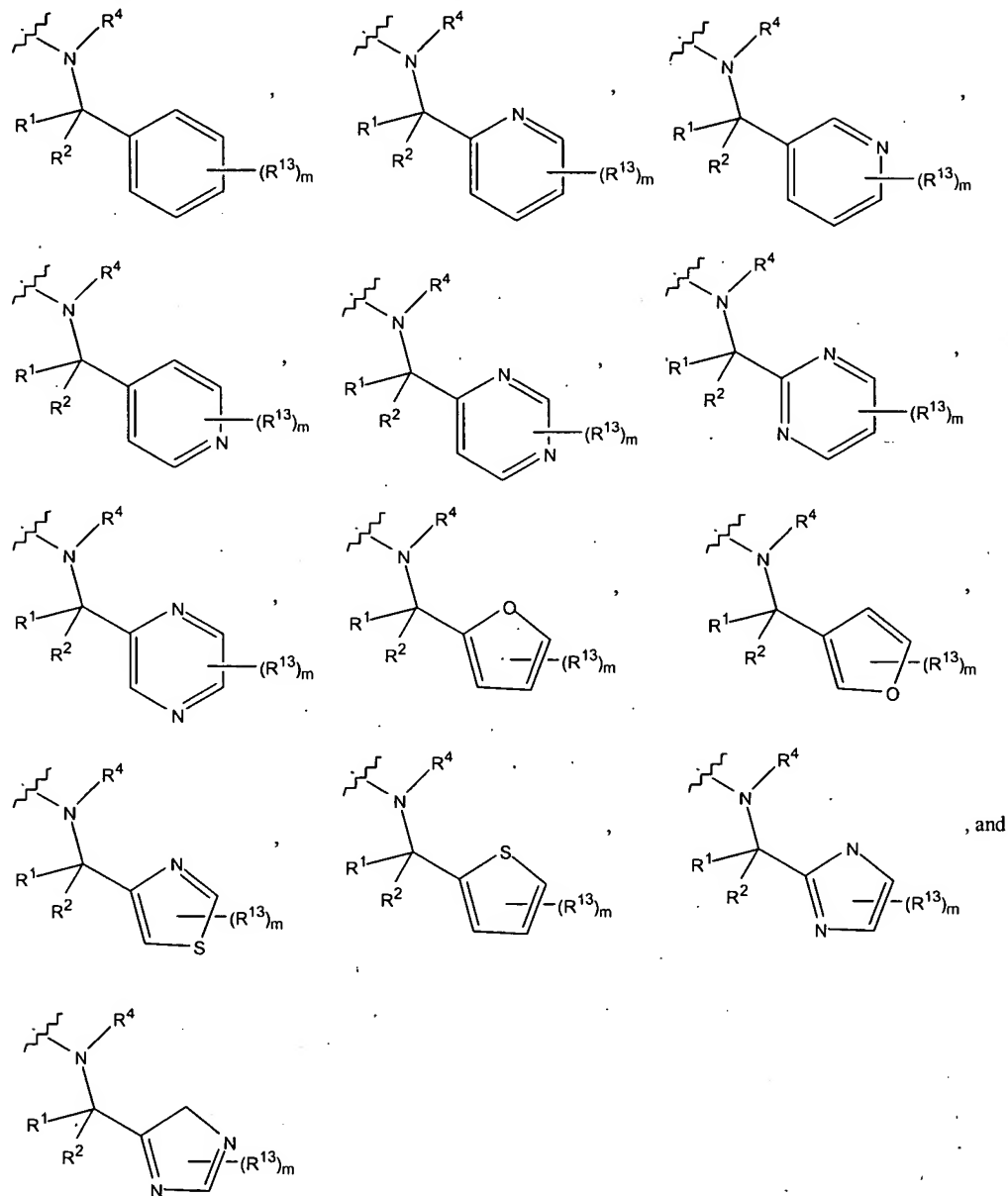
35. (Original) A compound of claim 2 wherein  $R^5$  and  $R^6$  are each substituents independently selected from the group consisting of hydrogen and  $-(C_1-C_6)alkyl$ .

36. (Original) A compound according to claim 2 of the formula 2

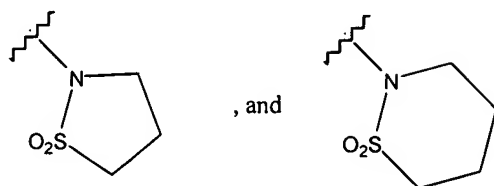


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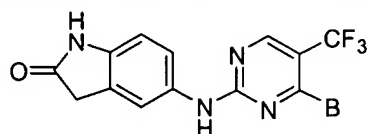
wherein A is selected from the group consisting of:



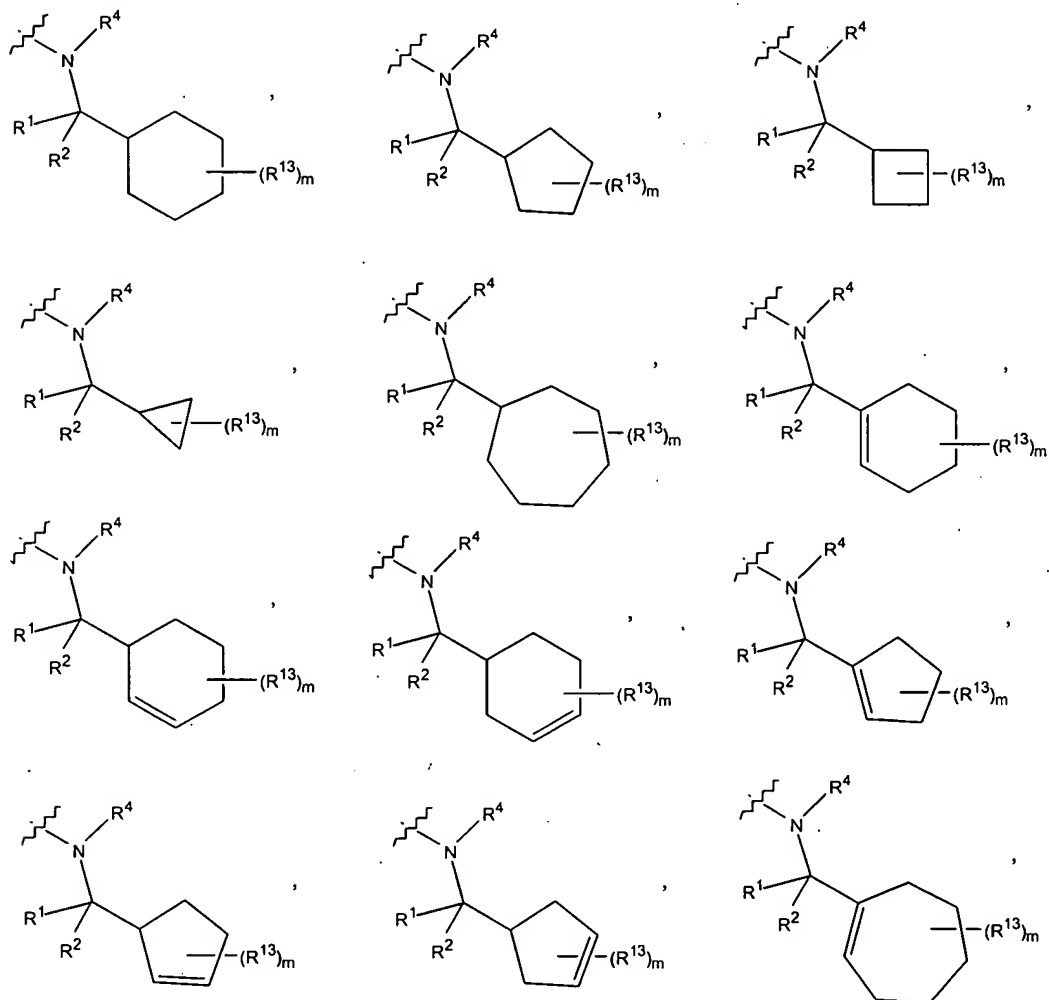
wherein m is an integer from 0-3 and R<sup>13</sup> is a substituent selected from the group consisting of hydrogen, halogen, hydroxy, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl, (C<sub>6</sub>-C<sub>10</sub>)-aryl, (C<sub>1</sub>-C<sub>9</sub>)-heteroaryl, (C<sub>2</sub>-C<sub>9</sub>)-heterocyclyl, O-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, O-(C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl, SO<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, SO<sub>2</sub>-(C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl, NHSO<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, N((C<sub>1</sub>-C<sub>6</sub>)-alkyl)(SO<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub>)-alkyl), N((C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl)(SO<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub>)-alkyl), N((C<sub>1</sub>-C<sub>6</sub>)-alkyl)(SO<sub>2</sub>-(C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl), N((C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl)(SO<sub>2</sub>-(C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl), OSO<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, SO<sub>2</sub>CF<sub>3</sub>, SO<sub>2</sub>NH<sub>2</sub>, SO<sub>2</sub>NH-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, SO<sub>2</sub>NH-(C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl, SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, SO<sub>2</sub>N((C<sub>1</sub>-C<sub>6</sub>)-alkyl)<sub>2</sub>, CF<sub>3</sub>, CO-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, CO-(C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl, COCF<sub>3</sub>, CO<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub>)-alkyl,

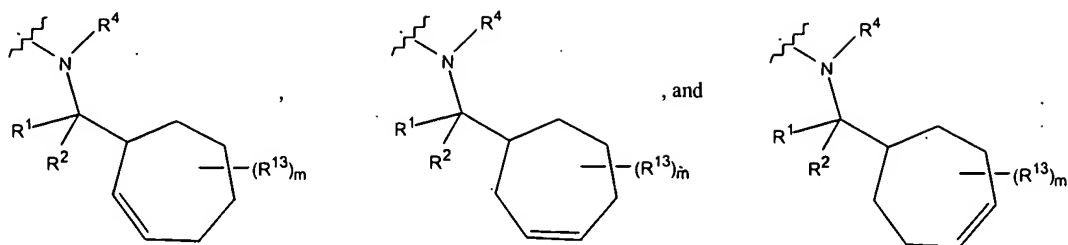


37. (Original) A compound according to claim 2 of the formula 3

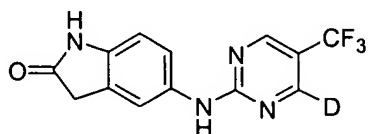


wherein B is selected from the group consisting of:

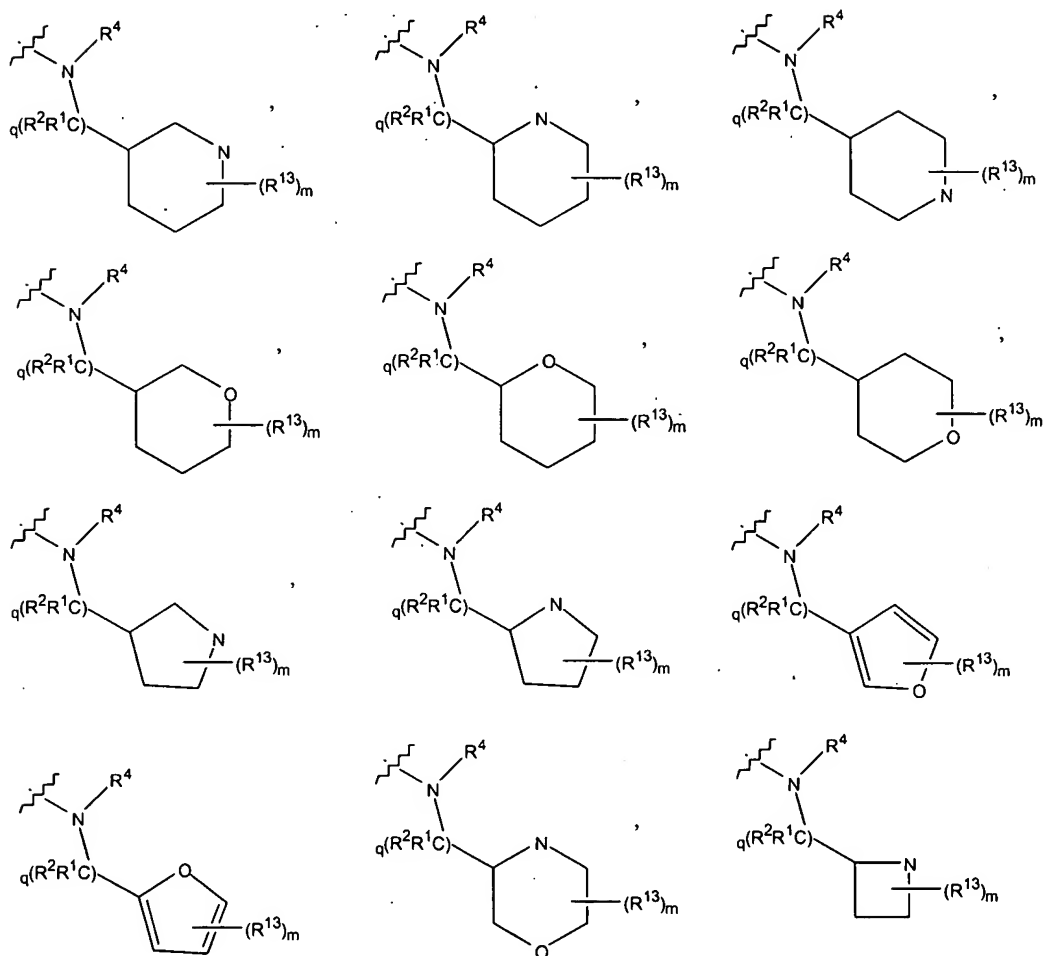




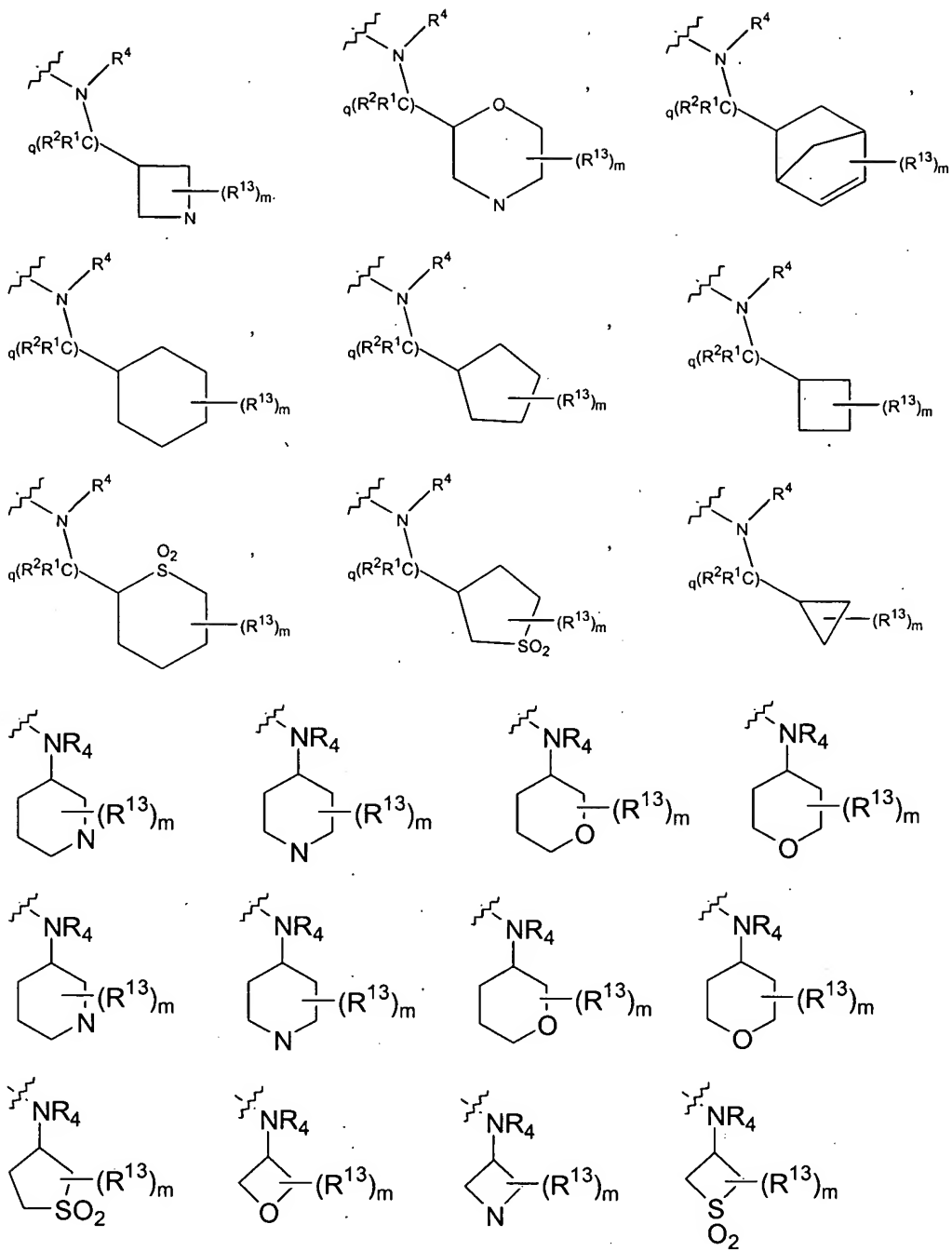
38. (Original) A compound according to claim 2 of formula 4



wherein D is selected from the group consisting of:

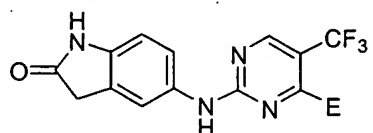




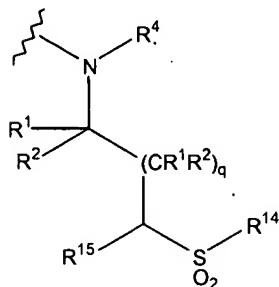


wherein q is an integer from 1-2.

39. (Original) A compound according to claim 2 of formula 5:



wherein E is selected from the group consisting of:



wherein R<sup>14</sup> is selected from the group consisting of (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl, and (C<sub>2</sub>-C<sub>9</sub>)-heterocyclyl, and R<sup>15</sup> is selected from the group consisting of hydrogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl, and (C<sub>2</sub>-C<sub>9</sub>)-heterocyclyl.

- 40. (Canceled)
- 41. (Canceled)
- 42. (Canceled)
- 43. (Canceled)
- 44. (Canceled)
- 45. (Canceled)
- 46. (Canceled)